

FEB 24 2006

K053504

**510(k) Submission Information:**

Device Manufacturer: Dade Behring Inc.

Contact name: Robert Eusebio, Regulatory Affairs Manager

Fax: 916-374-3144

Date prepared: August 22, 2005

Product Name: Microdilution Minimum Inhibitory Concentration (MIC) Panels

Trade Name: MicroScan® Synergies plus™ Gram-Positive MIC/Combo Panels

Intended Use: To determine antimicrobial agent susceptibility

510(k) Notification: New antimicrobial - Erythromycin

Predicate device: MicroScan® Synergies plus™ Gram-Negative MIC/Combo Panels and MicroScan® Dried Gram-Positive Panels

**510(k) Summary:**

MicroScan® Synergies plus™ Gram-Positive MIC/Combo Panels, utilizing both the MicroScan® Rapid Fluorogenic Identification and Dried Overnight Antimicrobial Susceptibility Testing (AST) technologies, are designed for use in determining quantitative and/or qualitative antimicrobial agent susceptibility of colonies grown on solid media of rapidly growing aerobic and facultative anaerobic gram-positive staphylococci.

The antimicrobial susceptibility tests are miniaturizations of the broth dilution susceptibility test that have been diluted in water and dehydrated. Various antimicrobial agents are diluted in water, buffer, or minute concentrations of broth, to concentrations bridging the range of clinical interest. Panels are rehydrated with Synergies plus™ Pos Broth, after inoculation with a standardized suspension of the organism. After incubation in the WalkAway® SI, or equivalent, System, or equivalent, for 4.5 - 18 hours, the minimum inhibitory concentration (MIC) for the test organism is read by determining the lowest antimicrobial concentration showing inhibition of growth.

The proposed MicroScan® Synergies plus™ Gram-Positive MIC/Combo Panel demonstrated substantially equivalent performance when compared with a frozen Reference Panel, as defined in the FDA document "Class II Special Controls Guidance Document: Antimicrobial Susceptibility Test (AST) Systems; Guidance for Industry and FDA", dated February 5, 2003. The Premarket Notification (510[k]) presents data in support of the MicroScan® Synergies plus™ Gram-Positive MIC/Combo Panel with Erythromycin.

The external validation was conducted with fresh and stock Efficacy isolates and stock Challenge strains. The external validations were designed to confirm the acceptability of the proposed Synergies plus™ Gram-Positive Panel by comparing its performance with a frozen Reference panel. Challenge strains were compared to Expected Results determined prior to the evaluation. The Synergies plus™ Gram-Positive Panel demonstrated acceptable performance with an overall Essential

Agreement of 96.8% for Erythromycin when compared with the frozen Reference panel.

Instrument reproducibility testing demonstrated acceptable reproducibility and precision for Erythromycin with Turbidity inoculum preparation method and the WalkAway® *SI* System or equivalent.

Quality Control testing demonstrated acceptable results for Erythromycin.



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

FEB 24 2006

Mr. Robert Eusebio  
Regulatory Affairs Manager  
Dade Behring, Inc.  
1584 Enterprise Boulevard  
West Sacramento, CA 95691-9972

Re: k053504  
Trade/Device Name: MicroScan® Synergies plus™ Gram-Positive MIC/Combo Panels  
Erythromycin (0.12 – 16 µg/ml, 0.5-4 µg/ml and 0.5-1, 4 µg/ml)  
Regulation Number: 21 CFR 866.1645  
Regulation Name: Fully automated short-term incubation cycle antimicrobial  
susceptibility system.  
Regulatory Class: Class II  
Product Code: LON, LRG, JWY, LTT  
Dated: December 16, 2006  
Received: January 9, 2006

Dear Mr. Eusebio:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements concerning your device in the Federal Register.

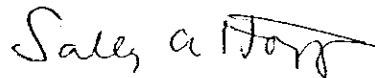
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Parts 801 and 809); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

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This letter will allow you to begin marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (240)276-0484. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>

Sincerely yours,

A handwritten signature in cursive script, reading "Sally A. Hojvat".

Sally A. Hojvat, M.Sc., Ph.D.  
Director  
Division of Microbiology Devices  
Office of *In Vitro* Diagnostic Device  
Evaluation and Safety  
Center for Devices and  
Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known): K053504

Device Name: MicroScan® Synergies plus™ Gram-Positive MIC/Combo Panels with Erythromycin (0.12 – 16 µg/ml, 0.5-4 µg/ml and 0.5-1, 4 µg/ml)

### Indications For Use:

The MicroScan® Synergies plus™ Gram-Positive MIC/Combo Panel is used to determine quantitative and/or qualitative antimicrobial agent susceptibility of colonies grown on solid media of rapidly growing aerobic and facultative anaerobic gram-positive staphylococci and enterococci. After inoculation, panels are incubated for 4.5 – 18 hours at 35°C +/- 1°C, in a WalkAway® SI, or equivalent, and read by the MicroScan® Instrumentation. Additionally, the panels may be incubated in a non-CO<sub>2</sub> incubator and the Antimicrobial Susceptibility Testing (AST) portions can be read visually, according to the Package Insert.

This particular submission is for the addition of the antimicrobial Erythromycin, at concentrations of 0.12 to 16 µg/ml, 0.5-4 µg/ml and 0.5-1, 4 µg/ml for Staphylococci, to the test panel.

The gram-positive organisms which may be used for Erythromycin susceptibility testing in this panel are:

*Staphylococcus aureus*

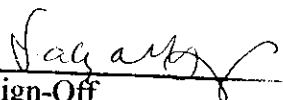
Prescription Use X  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER PAGE IF NEEDED)

Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

  
Division Sign-Off

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510(k) Summary

Office of In Vitro Diagnostic Device  
Evaluation and Safety

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2/23/2006

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